

LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



**OFFICE OF FISHERIES
INLAND FISHERIES SECTION**

PART VI -A

WATERBODY MANAGEMENT PLAN SERIES

BAYOU BONNE IDEE

LAKE HISTORY & MANAGEMENT ISSUES

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LAKE HISTORY

GENERAL INFORMATION

Date Lake formed

Bayou Bonne Idee was impounded with four weirs and the 1st two weirs were built in 1955. The Southernmost weir was built in 1976 and the northernmost weir was built in 1988.

See [Appendix IV](#).

Impoundment

Ownership belongs to the State of Louisiana.

< <http://doa.louisiana.gov/slo/slabsdataaccess.htm> >

Size (surface area)

Pool	Acres
1	370
2	670
3	470
4	390
Total - 1,900	

Watershed

71 square miles (24:1 ratio of watershed to lake area). Primarily cotton, soybean, and cattle farms, woodlands, single-family homes and camps. Fertile soil.

Pool Stage

1st pool – 78 ft., MSL (depth = 12 ft.), 2nd pool – 83 ft. (depth=10 ft.), MSL, 3rd pool – 86 ft. (depth=8 ft.), MSL, 4th pool – 88 ft. MSL (depth=6 ft.)

Parish

Morehouse (Figure 1)

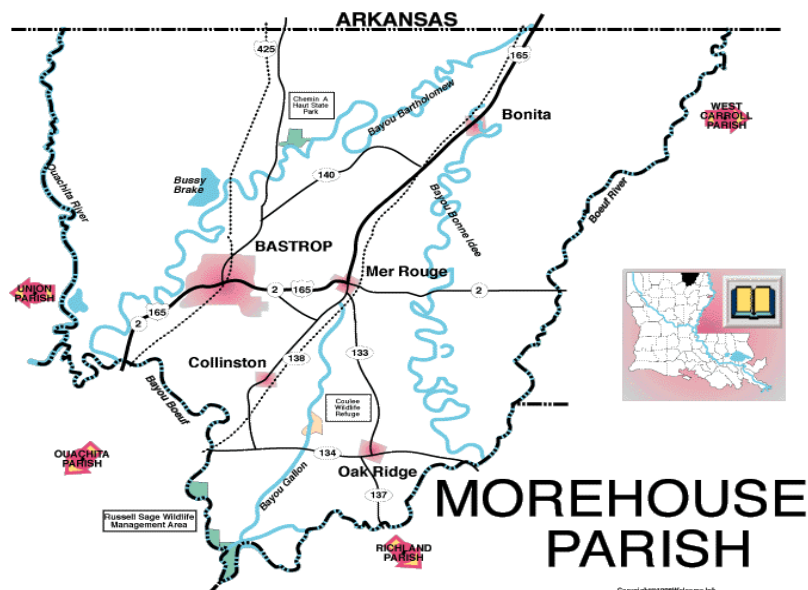


Figure 1. Map showing location of Bayou Bonne Idee.

Spillway width

The weir that is located on the northernmost end (1st Pool) of the lake is 120 feet wide with a 2 foot temporary extension at the top to increase the volume of water retained within the lake. The 2nd pool (the “Goatwalk”) has a 66 foot wide weir that has a 16 inch temporary extension at the top ([Appendix I](#)). Pool 3 (Rock pile/Barham weir) has a 120 foot weir and also has a 16 inch temporary extension at the top. Pool 4 (Bull Chute) has a 120 foot weir at its base with no extension on the top.

Drawdown description

There are control gates at every dam and these gates can be used to completely drawdown each pool. Water can be drawn down at 1 foot intervals.

LAKE AUTHORITY

Management – Louisiana Department of Wildlife and Fisheries under authority provided in Louisiana Revised Statutes Title 56.

TITLE 56: RS: 56:5

§5. General Powers and Authority

A. The commission, through its director:

(1) May sue and be sued; and

(2) Shall have and exercise all authority and power as was prescribed by law for the prior commissioner of conservation and the commissioner of wildlife and fisheries in relation to the wildlife of the state, including wild game and nongame quadrupeds or animals, game, oysters, fish, and other aquatic life.

B. Any function or authority vested to the prior commissioner of conservation and the commissioner of wildlife and fisheries concerning any of the resources under the jurisdiction of the director of the Wildlife and Fisheries Commission, and all records, equipment, funds, and other assets in relation to such resources, are transferred to the Louisiana Wildlife and Fisheries Commission.

C. The commission shall adopt rules and regulations necessary to protect certain of the state's natural resources other than fish and wildlife, especially such resources as standing trees which are otherwise protected by law but have no specific provision for enforcing such protection.

Amended by Acts 1974, No. 717, §1; Acts 1980, No. 795, §2.

Drawdown Schedule

There is no scheduled drawdown though the waterbody is routinely lowered through agricultural irrigation.

Association

Bayou Bonne Idee Gravity Drainage Board has 5 members, each of whom is appointed by the Morehouse Parish Police Jury (Table 1). Drainage board created in 1975.

Table 1. Membership of the Bayou Bonne Idee Gravity Drainage Board.

BAYOU BONNE IDEE GRAVITY DRAINAGE BOARD		
Lynn Winnon, Jr. (Chairman)	4619 Lynn Winnon Rd. Oak Ridge, LA 71264	(318) 244-5346
Cecil Sims (Secretary)	11401 Claude Deville Rd. Mer Rouge, LA 71261	(318) 647-5430
Jerry White	11332 Hideaway Rd. Mer Rouge, LA 71261	(318) 647-3349
Pete Blakeney	13709 Olen Hughes Rd. Bonita, LA 71223	(318) 823-3185
Marshal Stephens	12384 Horseshoe Lake Rd. Mer Rouge, LA 71261	(318) 647-5628

Funding Source

On November 5, 2002 a tax that was initiated by Bayou Bonne Idee Gravity Drainage Board was approved by the public (Morehouse Parish) to provide funding for Bayou Bonne Idee improvements. This proposition was the second ten year tax provided by Morehouse Parish. See proposition below:

BONNE IDEE GRAVITY DRAINAGE DISTRICT PROPOSITION

SUMMARY: 10-YEAR 1.35 MILL PROPERTY TAX CONTINUATION FOR CONSTRUCTION, DEVELOPMENT, MAINTENANCE AND OPERATION (LIMITED TO THE UPPER BANKS OF THE BONNE IDEE) OF GRAVITY DRAINAGE WORKS IN AND FOR BONNE IDEE GRAVITY DRAINAGE DISTRICT, INCLUDING THE PAYMENT OF ELECTION COSTS.

Shall Bonne Idee Gravity Drainage District of the Parish of Morehouse, State of Louisiana (the "District"), continue to levy and collect a special tax of one and thirty-five hundredths (1.35) mills, on all the property subject to taxation within the District, for a period of ten (10) years, beginning with the year 2003 and ending with the year 2012, for the purpose of construction, development, maintenance and operation (limited to the upper banks of the Bonne Idee) of gravity drainage works in and for the District, including the payment of election costs.

Previous Commission

Bayou Bonne Idee Game and Fish Preserve

Authorization

Created in 1952 by H.B. 267, Act No. 248

To establish the Bayou Bonne Idee Game and Fish Preserve, Parish of Morehouse; to define the territorial limits of said Game and Fish Preserve; to create a Commission to administer and govern said Preserve under the supervision of the Department of Wild Life and Fisheries; to designate the domicile of said Preserve; to provide acquisition of lands or water bottom by donations, purchase or expropriation; to provide that private citizens may retain their mineral rights in, on, or under any lands leased or upon which a servitude has been created to said Commission; to provide that rules and regulations for the operation of said Game and Fish Preserve shall be adopted and homologated by said Commission after first being approved by the Department of Wildlife and Fisheries; to authorize the Department of Public Works, State of Louisiana, to build and construct such dams or other works as may be necessary or beneficial in

impounding the waters of Bayou Bonne Idee; and to repeal all laws or parts of laws in conflict herewith.

Abolished in 1981 by H.B. 1690, Act 858.

Notwithstanding any provisions of R.S. 56:801 to the contrary, the game and fish commissions created by the following Acts, as amended are hereby abolished, and their powers, duties, functions, and responsibilities are transferred to the secretary of the Department of Wildlife and Fisheries and hereafter shall be exercised and performed as provided in Part IV of Chapter 22 of this Title, and the game and fish preserves created by the following Acts, as amended, are hereby placed within the Department of Wildlife and Fisheries and shall exercise and perform their powers, duties, functions, and responsibilities as provided for agencies transferred in accordance with the provisions of Part II of Chapter 22 of this Title. Any parish or parishes, by formal resolution of the governing authority of each parish affected, pursuant to R.S. 56:721 et seq. in relation to the game and fish preserves for which commissions are hereby abolished.

(2) Bayou Bonne Idee Game and Fish Commission (Act No. 248 of the 1952 Regular Session, as amended)

Maps

Maps are available at the NRCS office in Bastrop.

Access

There are 4 public boat launching facilities available for use at Bonne Idee. All are free of charge. The Highway 2 ramp has a \$2.00 voluntary fee, which is used for upkeep of parking lot. A private ramp (Thomas) is also available for a fee of \$2.00. The GPS coordinates for these ramps are shown below in Table 2. **See Appendix IV for map.**

Table 2. Listing of Bayou Bonne Idee boat ramps, with coordinates and description

RAMP NAME	COORDINATES		RAMP	PARKING
Hwy 2 Ramp	32° 46' 8.05"	-91° 42' 51.34"	Concrete	Paved - 40 Trailers
Bull Chute	32° 37.90"	-91° 40.19"	Concrete	Paved - 10 Trailers
Lost Ramp	32° 43' 23.31"	-91° 42' 52.77"	Concrete	Paved - 35 Trailers
Barham Dam	32° 39' 42.09"	-91° 42' 55.59"	Dirt	Dirt - 3 Trailers
Thomas Ramp	32° 42' 29.28"	-91° 43' 45.24"	Concrete	Paved – 5 Trailers

Boat Docks

Public boat docks located at Highway 2 ramp and at Lost Ramp enable boaters to temporarily moor boats while parking.

Piers

There are a large number of private piers throughout Bayou Bonne Idee associated with residential houses and camps. No public piers are available.

PHYSICAL DESCRIPTION OF LAKE

Shoreline length

108 miles

Timber type

Standing timber in the lake bottom is restricted to a small number of large dead cypress (*Taxodium distichum*) trees. The surrounding lands are primarily agriculture and some woodland.

Average depth

6.5 feet

Maximum depth

14 feet

Natural seasonal water fluctuation

2-3 feet

Shoreline development by landowners

Residential with boat houses and piers

EVENTS / PROBLEMS

The middle weirs were built in 1955.

The southernmost weir was washed out in 1991 flood and was replaced in the fall of 1993.

The Bayou Bonne Idee Gravity Drainage Board made improvements to the weirs at the Rock Pile near Oak Ridge and the Goat Walk near Mer Rouge during the summer of 2015. Larger 400 – 700 lb. rocks were added to these weirs.

Drawdowns

Southernmost pool was completely drawn down in 1993 to replace the weir.

Flooding

High flood conditions in 1991 washed out the southernmost weir.

Water Supply

Water level is typically low in dry summer months because of agricultural irrigation use.

MANAGEMENT ISSUES

AQUATIC VEGETATION

During the warmer months, aquatic vegetation has historically been prevalent in the shallow waters of Bayou Bonne Idee. Water Hyacinth (*Eichhornia crassipes*) has been extremely prolific within the bayou. In 1998, the hyacinth was so severe that boat spray crews (seven) from other Districts were deployed for spraying operations to reduce vegetation to a more controllable level. Duckweed (*Lemna* spp.) has also been a species of concern, with large surface mats forming in various areas and impacting shoreline property owners, boaters, and contributing to anoxic conditions in the water during the summer. The most problematic areas in recent years have been in the upper pools north of Hwy. 2. These pools become very shallow during summer months and receive little wind action. Alligator weed (*Alternanthera philoxeroides*) is common throughout the bayou, but becomes a nuisance in the upper pools.

Type map

Currently no type map surveys have been conducted on Bonne Idee.

Treatment history by year available

Applications of glyphosate, diquat, and 2,4-D have been typically used to control emergent and floating species, which consists mostly of water hyacinth, duckweed, and alligator weed. More recently, the herbicides imazamox and imazapyr have been used for alligator weed control. The lake had a large-scale spraying of water hyacinth in 1998, which used 7 spray crews spraying 2,4-D. Since then, nuisance vegetation has been controlled by periodic herbicide applications by District 2 spray personnel. Table 3 shows the total acreage sprayed on Bayou Bonne Idee since 2005.

Table 3. Total acres of vegetation treated

Year Sprayed	# Acres Sprayed
2005	35
2006	183.95
2007	665.6
2008	1427.15
2009	522
2010	1003
2011	168
2012	1104
2013	416
2014	207
2015	242

HISTORY OF REGULATIONS

Recreational

Statewide regulations for all fish species; current recreational fishing regulations may be viewed at the following link: <http://www.wlf.louisiana.gov/regulations>

Commercial

Statewide regulations on all species; current commercial fishing regulations may be viewed at the following link: <http://www.wlf.louisiana.gov/regulations>

DRAWDOWN HISTORY

Success

The only documented drawdown was conducted in 1993 to replace the southernmost weir.

The primary water use of Bayou Bonne Idee is for recreational activities, primarily fishing. It is also heavily used for irrigation for the surrounding farmland. The bayou is not currently under a drawdown schedule but is often taken to levels lower than pool stage during the summer through irrigation water. The north lake is used most for irrigation and can be almost entirely drained.

FISH KILLS / DISEASE HISTORY

Bayou Bonne Idee has experienced multiple fish kills due to low dissolved oxygen levels. These kills occurred and were documented in 1997, 1999, 2003, 2004, 2005, and 2007, 2009, and 2012. Brief descriptions of these kills are shown in [Appendix II](#).

CONTAMINANTS / POLLUTION

Water quality

Bayou Bonne Idee is currently listed as impaired by the EPA because of mercury concentrations. Water quality concerns noted for Bayou Bonne Idee watershed and the related US Environmental Protection Data are provided in [Appendix III](#). Additional information is available from the following EPA and LADEQ links:

<http://www.deq.louisiana.gov/apps/305db/show2.asp?WBID=LA080902>

Water level

Historic and Real-time water level data are unavailable for Bayou Bonne Idee but data is available for nearby Bayou Bartholomew from the USGS site below:

<http://waterdata.usgs.gov/nwis/uv?07364200>

BIOLOGICAL

Fish Sampling History

Rotenone sampling conducted 1964 – 1994. Rotenone sampling discontinued due to negative public sentiment and availability of data from alternative sampling techniques. Electrofishing is currently used as the primary largemouth bass sampling tool. Lead netting is utilized as the primary crappie sampling tool. Gill netting is used to sample large fish, including bass and commercial species.

Table 4 below describes historical sampling since 1964 and scheduled sampling until 2018.

Table 4. Summary of fisheries sampling conducted on Bayou Bonne Idee, 1964 – 2018.

BAYOU BONNE IDEE BAYOU FISH SAMPLING	
1964 - 1994	Rotenone 1 to 2-one acre sets (Only sampled in 1964, 1971, 1973, 1975, 1984 -1987, 1990, and 1994).
1991	No sampling
1992	Electrofishing - 4-15 minute samples (spring and fall) & 1 fall forage sample <ul style="list-style-type: none"> • Age & growth – Largemouth bass Gill Netting - 2 samples each including 100' 2.5, 3.0, 3.5, 4.0 in. bar Shoreline seining - 2 samples
1993	No sampling
1994	Electrofishing 3-15 minute samples (spring and fall) Rotenone 2-one acre sets
1995	Gill Netting - 2 samples each including 300' 2.5, 3.0, 3.5, 4.0 in. bar
1996	Electrofishing - 5-15 minute samples (spring and fall) <ul style="list-style-type: none"> • Age & growth – Largemouth bass
1997-1999	No Sampling
2000	Electrofishing - 5-15 minute samples (fall) <ul style="list-style-type: none"> • Age & growth – Largemouth bass
2001	No Sampling
2002	Electrofishing - 4-15 minute samples (fall) <ul style="list-style-type: none"> • Age & growth – Largemouth bass
2003	No Sampling
2004	No Sampling
2005	Electrofishing – 1-15 minute sample (May) Lead nets – 4 Stations each including ½, 1, 1 ½, 2, in. bar
2006	Electrofishing - 4 - 15 minute samples (spring), 3 - 15 minute samples (fall) <ul style="list-style-type: none"> • Frame/Lead Nets - 9 stations Age & growth – crappie
2007	No Sampling
2008	Electrofishing 3 - 15 minute samples (fall) <ul style="list-style-type: none"> • Age & growth – Largemouth bass Lead Nets – 3 stations
2009	Lead Nets – 3 stations Age & growth – crappie
2010	No Sampling

2012	Lead Nets – 3 4 stations Electrofishing: 4 stations, spring and fall, incl. fall forage sample Seining: 4 stations
2013	Gill Netting – 3 stations Seining: 4 stations
2014	No Sampling Scheduled
2015	No Sampling Scheduled
2016	Gill Netting – 3 stations
2017	Electrofishing: 4 stations, spring and fall, incl. fall forage sample
2018	No Sampling Scheduled

Lake records

No lake records compiled.

See LOWA State Records http://www.laoutdoorwriters.com/index.asp?pg=fr_choose

Stocking History

Existing fish population (listed below) not removed before impoundment.

Table 5 below lists the fish stockings that have been made by LDWF.

Table 5. History of fish stockings on Bayou Bonne Idee.

Date	Number / Species Stocked
1982	924 crappie, 312,585 bluegill, 104,195 redear, 8,000 channel catfish
1987	10,080 blue catfish
1993	291,000 bluegill
1994	20,000 native largemouth bass, 43,268 channel catfish

Genetics

Genetics sampling has not been conducted on this waterbody.

Species profile

Table 6 below lists the fish species documented from Bayou Bonne Idee.

Table 6. List of fish species documented from Bayou Bonne Idee, Louisiana.

LIST OF FRESHWATER FISHES OF BAYOU BONNE IDEE

Lamprey Family, PETROMYZONTIDAE

Chestnut lamprey, *Ichthyomyzon castaneus* Girard

Paddlefish Family, POLYODONTIDAE

Paddlefish, *Polyodon spathula* (Walbaum)

Gar Family, LEPISTOSTEIDAE

Spotted gar, *Lepisosteus oculatus* (Winchell)

Longnose gar, *Lepisosteus osseus* (Linnaeus)

Shortnose gar, *Lepisosteus platostomus* Rafinesque

Bowfin Family, AMIIDAE

Bowfin, *Amia calva* Linnaeus

Freshwater Eel Family, ANGUILLIDAE

American eel, *Anguilla rostrata* (Lesueur)

Herring Family, CLUPEIDAE

Gizzard shad, *Dorosoma cepedianum* (Lesueur)

Threadfin shad, *Dorosoma petenense* (Günther)

Minnow Family, CYPRINIDAE

Blacktail shiner, *Cyprinella venusta* (Girard)

Common Carp, *Cyprinus carpio* Linnaeus

Golden shiner, *Notemigonus crysoleucas* (Mitchill)

Weed shiner, *Notropis texanus* (Girard)

Sucker Family, CATOSTOMIDAE

Lake chubsucker, *Erimyzon sucetta* (Lacépède)

Smallmouth buffalo, *Ictiobus bubalus* (Rafinesque)

Bigmouth buffalo, *Ictiobus cyprinellus* (Valenciennes)

Black buffalo, *Ictiobus niger* (Rafinesque)

Spotted sucker, *Minytrema melanops* (Rafinesque)

Freshwater Catfish Family, ICTALURIDAE

Black bullhead, *Ameiurus melas* (Rafinesque)

Yellow bullhead, *Ameiurus natalis* (Lesueur)

Blue catfish, *Ictalurus furcatus* (Lesueur)

Channel catfish, *Ictalurus punctatus* (Rafinesque)

Tadpole madtom, *Noturus gyrinus* (Mitchill)

Flathead catfish, *Pylodictis olivaris* (Rafinesque)

Pirate Perch Family, APHREDODERIDAE

Pirate perch, *Aphredoderus sayanus* (Gilliams)

Killifish Family, CYPRINODONTIDAE

Golden topminnow, *Fundulus chrysotus* (Günther)

Blackstripe topminnow, *Fundulus notatus* (Rafinesque)

Blackspotted topminnow, *Fundulus olivaceus* (Storer)

Livebearer Family, POECILIIDAE

Western mosquitofish, *Gambusia affinis* (Baird and Girard)

Silverside Family, Atherinidae

Brook silverside, *Labidesthes sicculus* (Cope)

Temperate Bass Family, Percichthyidae

White bass, *Morone chrysops* (Rafinesque)

Yellow bass, *Morone mississippiensis* Jordan and Eigenmann

Sunfish Family, Centrarchidae

Flier, *Centrarchus macropterus* (Lacépède)

Banded pygmy sunfish, *Elassoma zonatum* Jordan

Green sunfish, *Lepomis cyanellus* Rafinesque

Warmouth, *Lepomis gulosus* (Cuvier)

Orangespotted sunfish, *Lepomis humilis* (Girard)

Bluegill, *Lepomis macrochirus* (Rafinesque)

Dollar sunfish, *Lepomis marginatus* (Holbrook)

Longear sunfish, *Lepomis megalotis* (Rafinesque)

Redear sunfish, *Lepomis microlophus* (Günther)

Spotted sunfish, *Lepomis punctatus* (Valenciennes)

Bantam sunfish, *Lepomis symmetricus* Forbes

Northern largemouth bass, *Micropterus salmoides salmoides* (Lacépède)

White crappie, *Pomoxis annularis* Rafinesque

Black crappie, *Pomoxis nigromaculatus* (Lesueur)

Drum Family, Sciaenidae

Freshwater drum, *Aplodinotus grunniens* Rafinesque

Threatened/endangered/exotic species

Three species of invasive carp likely present:

Grass carp, *Ctenopharyngodon idella*

Bighead carp, *Hypophthalmichthys nobilis*

Silver carp, *Hypophthalmichthys molitrix* (CONFIRMED)

CREEL

Historic Information/Type

Recreational angler surveys have not been conducted on this impoundment.

HYDROLOGICAL CHANGES

Water holding capacity has been changed throughout Bayou Bonne Idee by the weir extensions. The northernmost waterbody is heavily impacted in summer months due to irrigation. During dry summers the area can be almost completely drained.

WATER USE

Hunting

Duck hunting limited and primarily concentrated to the northern end of the watershed.

Skiing

This body of water has no potential for skiing because of the large number of trees present throughout the stream channel.

Swimming

N/A

Fishing

Excellent fishing opportunities for both shoreline and boating anglers

Irrigation

Agricultural and some residential

Highway Rights of Way

Parking on highway rights of way is prohibited by the Louisiana Department of Transportation and Development.

Flood Mitigation

Drawdown Schedule

N/A

APPENDIX I. TEMPORARY EXTENSION ON THE TOP OF WEIRS

[\(return to spillway\)](#)



APPENDIX II. FISH KILL INFORMATION

[\(return to fish kills\)](#)

1997

On April 16, 1997 a small fish kill was observed by Randy Lively and James Brantley (LDWF personnel) and personnel from DEQ and the Dept. of Agriculture on Bayou Bonne Idee near the Bar Nun Marina. They found 12 buffalo and 2 largemouth bass which appeared to have been dead for several days. No other fish in distress were noted.

Water quality North of Bar Nun had DO readings of 6.1 ppm at 1 meter and 3.2 ppm at 3 meters with total depth being 3.6 meters. Water quality South of Bar Nun had DO readings of 1.4 ppm at 1 meter and 0.6 ppm at 3 meters. A large mat of water hyacinth was near the point where this sample was taken. Hyacinth control workers had been spraying in the vicinity of the fish kill and decomposing hyacinths likely contributed to the low DO. This kill seemed to be directly caused by low DO.

1999

Fish kill was observed by James Brantley (LDWF personnel) on 10/4/1999 and was confined to a 6 ft. X 10 ft. inlet off the main water body. There was a water exchange between the inlet and the main water body. No dead or distressed fish were observed in the main water body. Fish kill thought to be caused by low dissolved oxygen. Water sample was taken by Department of Agriculture.

2003

Received telephone call from James Harrell in reference to fish dying at Bayou Bonne Idee Bayou approx 1 mile upstream of the Hwy 2 Bridge. Arrived at the site at 0800 7-29-03. Mike Wood observed complete coverage of duckweed at the location. Water quality was checked with HydroLab equipment. Dissolved oxygen was measured at 0.3 ppm. Upon consideration of the above mentioned facts, cause of the fish kill was attributed to low dissolved oxygen caused by complete coverage of aquatic vegetation. As a result of the coverage photosynthesis and oxygen absorption from the atmosphere were eliminated.

Mr. Harrell was advised of the findings on the site. Later in the day I was contacted by a reporter from the Bastrop Daily Enterprise. Conditions of the kill were explained. All related questions were answered.

2004

Fish kill first reported to LDWF on 7/29/04 and investigated by LDWF, LDEQ, and LDAF on the morning of 7/30/04. The kill was reported by several residents of the area. Only small bluegill and various size crappies were seen dead. There were no abnormal characteristics of the fish or water. The area of dead fish stretched 3 miles from just above "Lost Ramp" south to the Horseshoe Lake Rd. bridge. Current and northerly winds are suspected to have carried the fish downstream. The total kill was conservatively estimated at approximately 3,400 fish, 85% being bluegill. Some dead fish were observed resting on the bottom, making an accurate estimation difficult. A resident (James Kinney 318-647-3013) at the scene reported seeing a crop duster fly over on 7/27 or 7/28, dumping an unknown substance onto the Bayou while spraying an adjacent field. The area reported to have

been sprayed coincides with the upper limit of the stretch of dead fish. All measured water quality parameters appeared normal. It seems very probable that an isolated event such as a pesticide spraying may have caused the kill. Water samples were taken by LDEQ and LDAF to test for pesticides. Results of the tests will be reported later.

2005

Randy Lively and Ryan Daniel investigated the fish kill at 9:30 am on 8/1/2005. The kill was reported on 7/30/05 by Cecil Simms. Mr. Simms reported no strange characteristics of the water and only saw dead fish in a 200 yard stretch behind residence. A rainfall occurred Friday, followed by winds out of the north. A large stretch of the bayou just north of Simm's residence is totally covered by duckweed. The bayou had been lower than normal due to crop irrigation. It is the conclusion of LDWF that the kill was most likely due to the complete coverage of duckweed and the rain event. Mr. Simms reported seeing some dead fish floating north to south so kill likely occurred just north of residence. The kill appeared to be isolated as dead fish were only observed here. Low dissolved oxygen is believed to be the cause, although Hydrolab was not working properly and could not confirm this. Fish kills of this nature are common in Bayou Bonne Idee, especially during summer when irrigation and evaporation cause water levels to become critically low. Other agencies not contacted due to small magnitude, obvious cause, and frequency of these kills.

2007

Ryan Daniel and Randy Lively reported a fish kill location on Woolen Lake by boat at 9:45 am on 7/16/07. They counted a total of 20 gizzard shad and 2 bluegill were seen in a 1-mile section of Bayou Bonne Idee, which is approx. 75 yards wide. Evidence of a thick duckweed mat was seen. Current and winds had broken up the mat. The fish kill may have occurred upstream of where reported due to condition of dead fish. Weather had been unusually cloudy, with some heavy rainfall. No plankton bloom was present. A partial turnover is likely to have occurred since stratification was not evident from water quality samples and the water was fairly dark colored. Nonetheless, D.O. levels were low, but not surprising due to previously listed factors. The kill appears to have happened in the immediate vicinity or just upstream as no dead fish were reported or seen anywhere else.

2008

No fish kills were reported.

2009

A fish kill was investigated on 9/23/09 just north of the Hwy. 2 bridge crossing. A few hundred fish of several different species were documented. The area was infested with duckweed and a heavy rainfall had occurred two days prior. Low dissolved oxygen was documented in the vicinity of the kill.

2012

A fish kill was investigated on 8/21/12 approximately 1 mile north of Lost Landing, near the earthen dam. It was estimated that a few thousand fish of several species were killed in this area following a heavy rainfall. Duckweed was believed to be a contributor to the low dissolved oxygen levels recorded. The water color was brown/grey, indicating a turnover had occurred.

APPENDIX III. FISH CONSUMPTION ADVISORY

[\(return to water quality\)](#)



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The following fish consumption advisory was issued on July 1, 2004 by the Department of Health & Hospitals, the Department of Environmental Quality, and the Department of Wildlife & Fisheries. For more information, please contact:

DHH
Shannon Soileau
(504) 568-8537

DEQ
Chris Roberie
(225) 219-3615

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Gary Tilyou
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FISH CONSUMPTION ADVISORY FOR BAYOU BONNE IDEE

In response to recent sampling and analysis of fish-mercury data, the Louisiana Department of Health & Hospitals (DHH), Department of Environmental Quality (DEQ), and Department of Wildlife & Fisheries (DWF) are issuing the following advisory for Bayou Bonne Idee in Morehouse parish where unacceptable levels of mercury have been detected in largemouth bass, freshwater drum (gaspergou), and bowfin (choupique, grinnel). The advisory area includes Bayou Bonne Idee from its headwaters near Jones, Louisiana to its confluence with the Boeuf River east of Oak Ridge.

DHH, DEQ, and DWF advise that the following precautions be taken when eating fish taken from Bayou Bonne Idee:

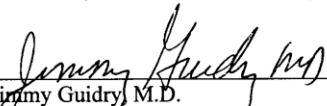
- **Women of childbearing age and children less than seven years of age SHOULD NOT CONSUME BOWFIN and should consume no more than ONE MEAL PER MONTH of largemouth bass and freshwater drum combined from the advisory area (a meal is considered to be half a pound of fish for adults and children).**
- **Other adults and children seven years of age and older SHOULD NOT CONSUME BOWFIN and should consume no more than FOUR MEALS PER MONTH of largemouth bass and freshwater drum combined from the advisory area (a meal is considered to be half a pound of fish for adults and children).**

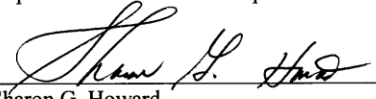
- **Unless the fish species is specifically addressed in the details of the advisory, please limit consumption of all species in an advisory area to 4 meals per month. Louisiana fish consumption advisories are based on the estimate that the average Louisiana resident eats 4 fish meals per month (1 meal = ½ pound). If you or your family members eat more than 4 meals of fish a month from local water bodies, you might increase your health risks. You can contact the Office of Public Health toll free at 1-888-293-7020 for more information about eating fish that contain chemicals.**

Mercury is an element that occurs naturally in the environment. It is released into the environment through natural processes and human activities. Consequently, there are small amounts of mercury in lakes, rivers, and oceans. Nearly all fish contain trace amounts of mercury. They absorb mercury from the water and sediment as they feed on aquatic organisms. Larger predator fish contain more mercury than smaller fish. Therefore, in general, it is recommended that smaller fish be consumed instead of larger ones.

People are exposed throughout their lives to low levels of mercury. One way they can be exposed to mercury is from eating contaminated fish. Health effects from harmful levels of mercury can include nervous system and kidney damage. Developing fetuses are more sensitive to the toxic effects of mercury, especially in the first trimester of pregnancy. In addition to developing fetuses, infants and children are more sensitive to the effects of mercury; therefore, consumption advisories are issued at lower fish tissue concentration levels for these groups.

This advisory is issued as a precaution. Further sampling will be carried out by DEQ to determine the need for modifications to this advisory, including an adjustment of the boundaries if necessary. If you have consumed largemouth bass, freshwater drum and/or bowfin from these waters, it is not likely that there is an immediate need to be concerned about the effects of mercury. However, you should consult your personal doctor if you are concerned.


Jimmy Guidry, M.D.
State Health Officer and Medical Director
Department of Health & Hospitals


Sharon G. Howard
Assistant Secretary, Office of Public Health
Department of Health & Hospitals

APPENDIX IV. MAP OF BAYOU BONNE IDEE

[\(return to date formed\)](#)

